

## VF Series

Trilithic VF Series tunable bandpass filters cover a frequency range from 24 MHz to 4,000 MHz with any single model covering an octave. Standard units are available with either a three or five section response and have a 3 dB bandwidth of 5% ± 1%\* with low insertion loss values from 0.2 dB through 1.5 dB. VSWR is less than 1.5:1.

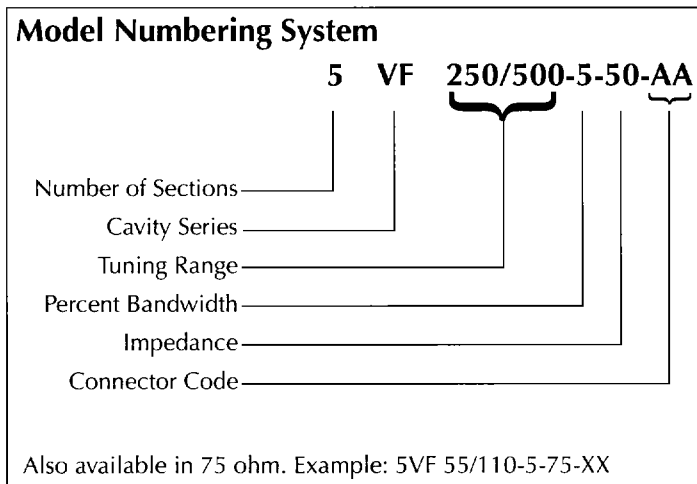
Each unit is housed in a sturdy aluminum case with high "Q" plated cavities. These cavities are iris coupled and shielded to minimize RF leakage. A constant filter response is maintained from the low end of the tuning cycle to the high end by varying the loaded capacitance of each section inversely as the frequency is increased.

The tuning arm is coupled directly to the driving mechanism which incorporates a precision vernier with a 6:1 ratio. An engraved dial which is calibrated directly in frequency indicates the center frequency of each filter response with resettability to within ± 0.5%, thereby eliminating calibration charts or guesswork.

With the excellent filtering characteristic of the VF bandpass series, they are ideally suited wherever precision laboratory measurements are required. They are used for noise and harmonic reduction, diplexing and channel selection, and wherever a high level of attenuation is required below and above the signal band.

Height is approximately 3".

\*Other bandwidths available, consult the factory.



## Electrical Specifications

Frequency Coverage	24 to 4,000 MHz
Impedance	50 or (75 Ohm to 1,000 MHz)
VSWR	Less than 1.5:1
No. Sections	3 or 5
Maximum Power	60 Watts

3 Sections; 5% 3 dB Bandwidth			
Model No.	Insertion Loss dB, Typical	Size (Inches)	
		L	W
3 VF 24/48-5-50-AA	0.6	6.25	5.563
3 VF 48/96-5-50-AA	0.6	6.25	5.563
3 VF 55/110-5-50-AA	0.6	6.25	5.563
3 VF 95/190-5-50-AA	0.6	6.25	5.563
3 VF 110/220-5-50-AA	0.6	6.25	5.563
3 VF 190/375-5-50-AA	0.6	6.25	5.563
3 VF 200/400-5-50-AA	0.6	6.25	5.563
3 VF 250/500-5-50-AA	0.6	6.25	5.563
3 VF 375/750-5-50-AA	0.6	6.25	5.563
3 VF 500/1000-5-50-AA	0.6	6.25	5.563
3 VF 750/1500-5-50-AA	0.6	6.25	5.563
3 VF 1000/2000-5-50-AA	0.6	4.875	3.125
3 VF 1500/3000-5-50-AA	0.6	4.875	3.125
3 VF 2000/4000-5-50-AA	0.6	3.75	2.625
5 Sections; 5% 3 dB Bandwidth			
5 VF 24/48-5-50-AA	0.8	9.313	5.563
5 VF 48/96-5-50-AA	0.8	9.313	5.563
5 VF 55/110-5-50-AA	0.8	9.313	5.563
5 VF 95/190-5-50-AA	0.8	9.313	5.563
5 VF 110/220-5-50-AA	0.8	9.313	5.563
5 VF 190/375-5-50-AA	0.8	9.313	5.563
5 VF 200/400-5-50-AA	0.8	9.313	5.563
5 VF 250/500-5-50-AA	0.8	9.313	5.563
5 VF 375/750-5-50-AA	0.8	9.313	5.563
5 VF 500/1000-5-50-AA	0.8	9.313	5.563
5 VF 750/1500-5-50-AA	0.8	9.313	5.563
5 VF 1000/2000-5-50-AA	0.8	7.063	3.125
5 VF 1500/3000-5-50-AA	0.8	7.063	3.125
5 VF 2000/4000-5-50-AA	0.8	5.25	2.625

## Connectors

Connector Style	Code	Connector Style	Code
N Female	A	UHF Female	I
N Male	B	UHF Male	J
BNC Female	C	SMA Female	K
BNC Male	D	SMA Male	L
TNC Female	E	F Type Female	X
TNC Male	F	Special	S
C Female	G		
C Female	H		

## Custom Designs

All standard units are provided with type N female connectors. Other connector types can be supplied. Other options of the VF series include modified frequency ranges and bandwidth coverage from 1% ± 0.5% to 10% ± 2% and special mounting provisions. For special filtering requirements, consult factory.